

Rechecking the gastric secretion after *all* symptoms have disappeared has borne out the wisdom of this procedure. The hyperacidity in uncomplicated cases disappears with the pain and also the occult blood as the ulcer heals.

Gastric ulcers are the common meeting ground of physician and surgeon. I have said above that they are potentially surgical, but since the introduction of protein therapy (and we have used sterile fat-free milk) we have had such good results in gastric ulcer patients that I am inclined to reserve the favorable cases for such treatment. If the ulcer crater as shown on x-ray plates is not too large and the stomach empties normally and occult blood disappears in two weeks and the crater itself gets steadily smaller, I would defer surgery. Marten⁶ has reported on milk injections as they have influenced symptoms and progress.

It is obvious that as the etiology of peptic ulcer in human beings is still a good deal uncertain in spite of certain definite evidence in part of the cases studied we cannot base therapy on etiology. It is reasonable in any event to remove all foci of infection and to prescribe a less stimulating and irritating diet. For the healing process we are dependent upon the well-established fact that mucous membranes show a remarkable tendency to heal if given any sort of chance.

An explanation of the tendency to recurrences may be found in what is established in etiology. If vagus neuritis from infection be a cause, then unless the vagus returns to normal we may expect recurrences. We cannot hope to cure the arteriosclerotic ulcers of the aged by medical means, nor can we expect to see regeneration of an area where necrosis results from thrombo-arteritis. If the involved area be small, it is conceivable that healing may take place. Hurst⁷ suspects cancerous change if the blood continues and the crater, after a month, is unchanged. R. Schmidt long ago called attention to Boas Oppler bacilli in the stool of these cases even when the gastric content still contains free HCl, and we have confirmed this finding.

Finally, clean up the infections as fast as possible, and begin teaching dietetics early. The men who live in restaurants, eat irregularly and what they like, especially when tired, neglect their infections, who overeat and react badly to worry and strain are poor medical patients, but they make up the surgical failures quite as often.

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THE LURE OF MEDICAL HISTORY

THE WILLIAM BEBB COLLECTION OF PRINTS OF PARIS HOSPITALS*

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IN the field of medical history there are endless opportunities for the satisfaction of almost any collector's fancy. Pictures, expressing so much more readily than words could ever do, are being more and more appreciated as desirable items in medico-historical libraries. Many notable collections of prints relating to medical history are to be found in California, among which may be mentioned those of Dr. LeRoy Crummer in Los Angeles, Dr. Herbert Evans in Berkeley, and Dr. William Kerr in San Mateo. To these should be added the interesting collection of prints relating chiefly to French hospitals deposited by Dr. William Bebb of Elkhorn, Wisconsin, in the University of California Medical School Library, San Francisco.

The Bebb collection includes about twenty prints of English hospitals and one or two of old American hospitals, but it is especially rich in material relating to the great hospitals of Paris. Practically every important hospital in Paris is represented not only by century-old prints of floor plans and elevations, but also by engravings, etchings, and lithographs of interior and exterior scenes associated with the buildings and grounds about them.

About 1810, H. Bessat apparently made a series of drawings combining general ground plans with front elevations of the leading hospitals of Paris. Engraved by Thierry, this series is especially well represented in the Bebb collection. A later group of scenes connected with the various hospitals was made by T. Guerin and engraved by C. Detrich for the purpose of illustrating a series of magazine articles on the Paris hospitals. There are a few early engravings of the seventeenth and eighteenth centuries included in the collection.

One of the most remarkable items in the Bebb collection is the original floor plan to scale of one of the provincial hospitals designed in 1809 by Comber for Bordeaux. The characteristic arrangement of the Parisian hospitals of this period, in the form of low buildings about large open courts, was apparently preserved, as this sketch shows, in the provinces. The space assigned in the building to the different types of service is clearly indicated, and careful arrangements seem to have been made for proper hygienic management.

THE LEADING CHARITY HOSPITALS OF PARIS AS ILLUSTRATED IN THE BEBB COLLECTION

L'Hôtel Dieu.—L'Hôtel Dieu of Paris is one of the oldest hospitals in the world, being founded

* This note was prepared from descriptive cards made by Miss Eva West for use in exhibiting the collection, and was edited for publication by Chauncey Leake and Sanford Larkey.

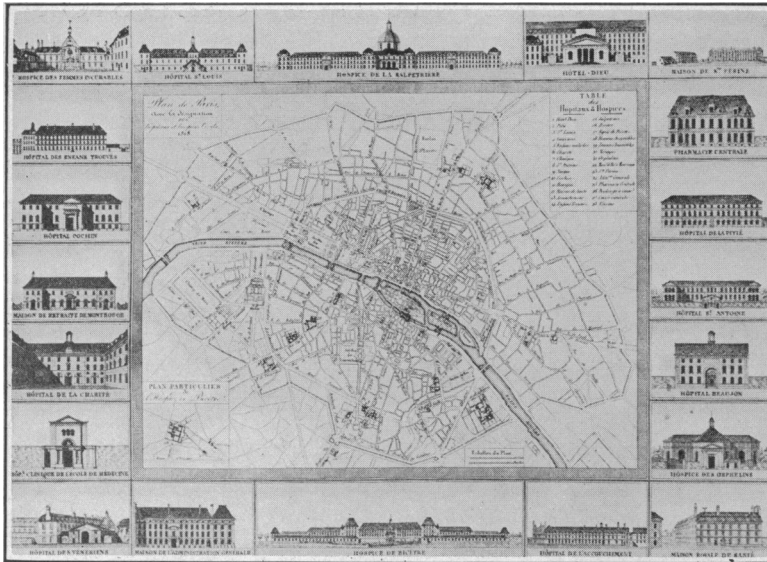


Fig. 1.—Map of Paris in 1818, showing locations and elevations of the leading hospitals of the city at that time

in 651, when the treasures of the Church were sold by Landri, Bishop of Paris, for the support of the large numbers of poor people who in that year sought in his palace an asylum from the miseries caused by a famine then prevailing. Moreover, Landri made provision for their spiritual and physical care by creating the order of Augustinian nuns who, throughout the existence of the Hôtel Dieu, have been in charge of its inmates. In 829 a converted monastery was removed and on its site a new building was erected, this being the real Hôtel Dieu. It consisted of four wards intended to accommodate nine hundred, but this number was greatly exceeded. The basement, fronting directly on the river Seine, was used for a maternity ward, and though the river at times rose above the level of the windows the patients were never moved out. From 830 to the early fourteenth century the hospital increased greatly in size with increasingly unsanitary conditions, as illustrated by the fact that at one time nine thousand people were accommodated in one thousand beds. In 1789 some of the wards

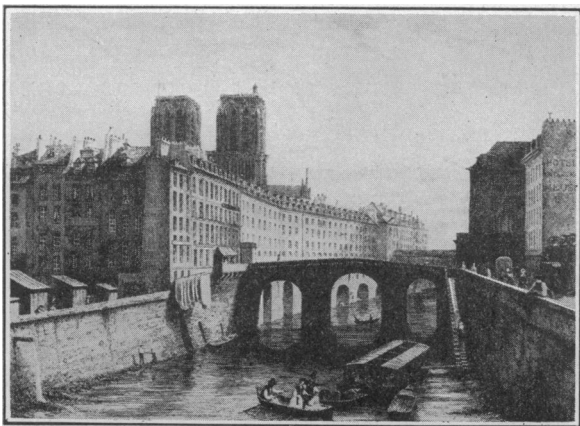


Fig. 2.—L'Hôtel Dieu, Paris, the oldest hospital in the world

were divided for contagious cases, but it was not until 1801 that any very beneficial changes were made when special hospitals for various maladies were established, the sexes separated and diseases classified according to their medical or surgical character. An excellent description of L'Hôtel Dieu has been published by Evans.¹

Hospice de la Salpêtrière.—La Salpêtrière, or L'Hospice de la Vieillesse pour Femmes, is probably the largest almshouse in the world. Constructed under the reign of Louis XIII as an arsenal (the saltpetre manufactory there gave the institution its name) but abandoned as such in 1656, the buildings were purchased by the government under Louis XIV and given over to be

used as a general hospital for the poor. It has a constant population of more than seven thousand, including four hundred attendants. Besides innumerable subdivisions, this hospice is divided into two principal sections—one for indigent women over seventy years of age, for those

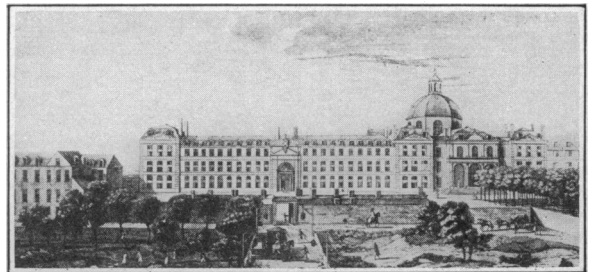


Fig. 3.—La Salpêtrière, Paris. An early print of one of the most famous of French hospitals

afflicted with incurable cancerous diseases, and for the blind; the other division is for lunatics, idiots, and epileptics. The infirmary, which is a large building detached from the rest of the hospital and surrounded by fine gardens and walks, contains four hundred beds, most of which are constantly occupied. It was here that Charcot made his great clinical demonstrations.

Saint Louis.—Saint Louis is an immense building, one floor high, consisting of many quadrangles with gardens between. Originating in the stress of the great plague, when over sixty-eight thousand people died in Paris in one year, it was constructed in 1607 by Henri IV, and bears the name of King Louis, a victim of the plague. Toward the end of the seventeenth century it received all forms of contagious disease, and now specializes in skin diseases. The wards are of great length, having but few windows. The baths, founded in 1816, open into each other, there being no corridors, and are used by both out-patients

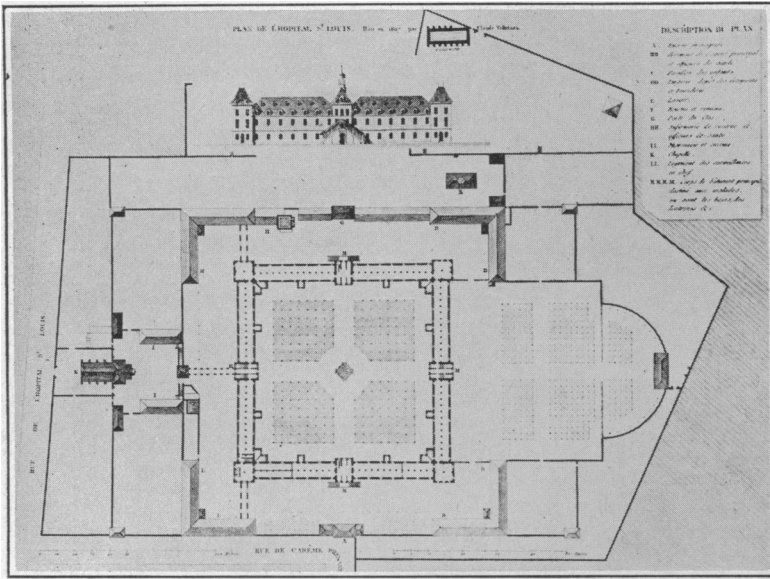


Fig. 4.—Hôpital Saint Louis. Bessat's ground plan and front elevation (1806) of the great Parisian dermatological clinic and hospital

and in-patients, twelve hundred to fifteen hundred being given daily.

Hôpital de la Charité.—In 1602, Marie de Médicis introduced from Italy four members of the order of Saint Jean de Dieu (called also Frères de la Charité) to whom she confided the management of a small hospital in the Rue de Petite Seyne. The present buildings were erected in 1607, part of them being occupied by the frères de Saint Jean, the rest devoted to the accommodation of the sick. In 1793 the name of this hospital was changed from L'Hôpital de la Charité to L'Unité, and did not recover its former name until the consulate. Previous to the Revolution, none but male patients were admitted. There being only two hundred beds, it required much influence to gain access. After 1790 an appropriation of twelve thousand francs was made by the National Convention for the support of one hundred additional beds for female patients. It now contains six hundred and fifty beds. The hospital is composed of a confused mass of irregular buildings between which are several courts and gardens where the convalescents are allowed to exercise. At one time the staff of physicians included Velpeau, Andral, Bouillaud (disciple of Broussais), Cruveilhier, Rayer, and Fouquier.

Hôpital des Femmes Incurables.—The Cardinal de la Rochefoucault founded this establishment in 1634, and planned it for indigent and incurable old women and girls. Sisters of Charity attend the inmates with most devoted care. The wards are large, and in the form of crosses, ar-

ranged on either side of the chapel, with which they communicate. Those on the ground floor are partitioned off into little compartments for the old inmates; the newly arrived ones are placed in the common and open wards on the second floor.

Hôpital de la Maternité.—This hospital occupies the buildings that formerly constituted the ancient Abbey of Port Royal, founded in 1625. It served as a prison from 1790 to 1795, when it became a hospital. It was first called La Bourbe, then La Maternité when the Council General purchased the buildings and changed them into a hospital for the care of pregnant women. Before that time such cases had been confined in the Hôtel Dieu, where most lamentable conditions

prevailed in the crowded wards. The École d'Accouchement is a school attached to L'Hôpital de la Maternité for the instruction of midwives, where a limited number of students come yearly for the two-year theoretical and practical course provided.

L'Hôpital de la Pitié.—This hospital was constructed by the order of Louis XIII, but in 1612 the buildings were appropriated by the magistrates for a prison for the poor. In 1657, when Salpêtrière was built, the houses of La Pitié received homeless and sick children. During the Revolution the hospital was called L'Hôpital des Enfants du Faubourg St. Victor, and then the Hôpital de la Patrie, and finally La Pitié when it became an annex of the Hôtel Dieu.

Hôpital des Enfants Malades.—Founded in 1735 by Languet de Guercy, Curate of Saint Sul-

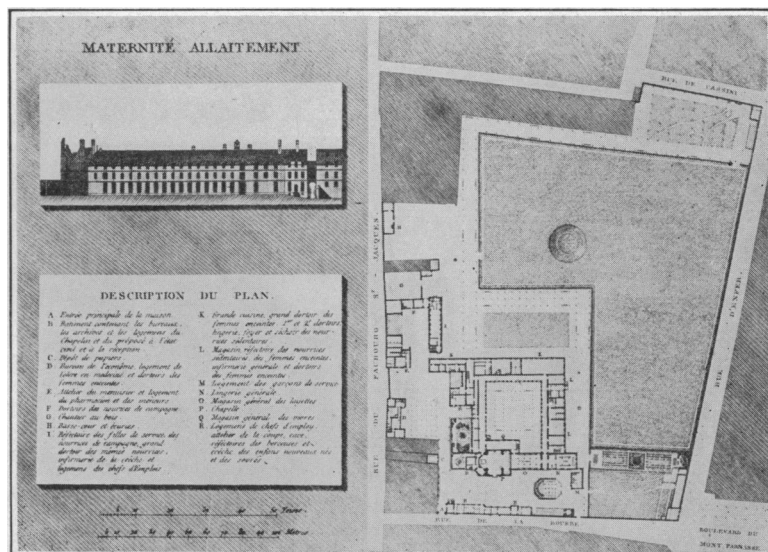


Fig. 5.—Hôpital de la Maternité. Bessat's ground plan and front elevation, drawn in 1811

pice, and with the patronage of Marie Leczinska, wife of Louis XV, this hospital was purchased in 1802 by the "Conseil des Hôpitaux" and converted into a hospital for sick children. Because of the devoted care given the little patients here, this institution was ever popular with parents and so always crowded. It had a notorious death rate because so many seriously ill patients were received, and from the lowest classes of society.

Saint Antoine.—Saint Antoine Hospital is situated in a Parisian suburb of that name. It is surrounded by large grounds and gardens. It was opened January 17, 1795 by a decree of the Convention, upon the site of an ancient convent founded in 1198 by Foulques de Neuilly and reconstructed in 1770. It contains nine hundred beds.

During the spring of 1929 the William Bebb collection was displayed in part at the University of California Medical School. During the spring and summer of 1930 it will be exhibited in part at the Lane Medical Library, Stanford University Medical School, San Francisco, and later in the library of the San Diego County Medical Society.

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CLINICAL NOTES AND CASE REPORTS

COMPRESSION FRACTURE OF THE FIFTH LUMBAR VERTEBRA*

REPORT OF CASE

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COMPRESSION fracture of the body of the fifth lumbar vertebra, uncomplicated by dislocation or compression fractures of other vertebrae, is rarely found. Review of the literature and experience shows that whereas fractures of the transverse and spinous processes and compression fractures of the bodies of other vertebrae are fairly common in injuries to the spine, the fifth lumbar vertebra singly is rarely affected. Osgood¹ reports that 40 per cent of all fractures of the spine are compression fractures of the bodies, usually only one body being involved. Of these, 70 to 80 per cent occur in the twelfth dorsal or first lumbar. In Wallace's series² of eighty-one cases, a single vertebra was involved in sixty cases. The only individual vertebrae not involved were the first and second cervical, sixth cervical, and first dorsal. Wallace reports the fifth lumbar vertebra crushed in ten cases (12 per cent), but these evidently occurred simultaneously with fractures of other vertebrae, as they are reported in a series of 125 fractures occurring in the eighty-

one cases. Hoy³ reports his own series of twenty-two lumbar fractures in which there is one case of crushing fracture of the fifth lumbar and one case in which the third, fourth, as well as the fifth lumbar vertebrae are involved. No other series of cases is reported in recent literature in which mention is made of fracture of the fifth lumbar.

The case reported below is a compression fracture of the body of the fifth lumbar vertebra which was treated by a bone fusion operation, resulting in complete restoration of the body of the vertebra.

REPORT OF CASE

W. C. L., male, age forty-nine years, on August 6, 1928, fell fourteen feet from a ladder, striking his back. He was rendered unconscious for about ten minutes. Upon regaining consciousness his first sensations were severe pains in the lower part of the back and down both legs. He was not dizzy or nauseated; there were no involuntary bladder or bowel movements; there was no motor paralysis. After lying in bed for about one week, he began to move about on crutches, and the pain was aggravated by any movement of the body. He was seen by us on September 15.

Physical examination showed extreme tenderness along the lumbar spine and limitation of motion of the spine in all directions. There was no marked scoliosis or lordosis, but there was some flattening of the lumbar curve.

Laboratory findings were all normal; Wassermann test was negative.

X-ray examination on admission showed a compression fracture of the fifth lumbar vertebra, fractures of the first, second, third, and fourth lumbar left transverse processes and fracture of the third lumbar spinous process. The compressed body was somewhat moth-eaten in appearance with its outline obliterated; Dr. F. Rice, roentgenologist to the Sutter Hospital, suggested the possibility of the presence of malignancy with a pathological fracture. The pictures were also submitted to Doctors H. Ruggles and W. E. Chamberlin for opinion. Doctor Ruggles reported: "... compression fracture of the body of the fifth lumbar vertebra. There is no forward displacement of the fourth upon the fifth, nor of the fifth upon the sacrum." Doctor Chamberlin reported: "... body of the fifth lumbar vertebra is very indistinct in spite of neighboring structures being very well demonstrated. A most important finding is the presence of an increase in the anteroposterior dimension of the body of the fifth lumbar. I am unable to conclude that there is a tumor or other disease in this vertebra. I interpret the findings as those of a crushing fracture of the body of the fifth lumbar."

In view of these reports, surgical intervention was deemed advisable. A bone fusion operation (modified Hibb's-Albee) was carried out. In order to further rule out any possibility of the presence of pathology previous to the accident, curettings were taken from the crushed vertebra to be examined and injected into a guinea pig. Microscopic examination showed no evidence of malignancy or tuberculosis, while subsequent guinea pig examination also was negative for tuberculosis. A double bone graft from the left tibia was performed. The grafts were laid from the third lumbar vertebra to the sacrum. A body cast was then applied.

Check-up x-ray examination two months later showed an increase in the bony density of the fifth lumbar vertebra with no rarefaction of bone about the graft. Physical therapy was instituted and the patient was fitted with a Taylor spring back brace. His recovery was very gradual but progressive, and he was able to move about with a cane at the end of ten weeks. X-ray examination in January 1929 showed continued increase in the amount of bone deposited within the body of the fifth lumbar vertebra.

* From the Sutter Hospital, San Francisco.